**BROWNFIELDS ASSESSMENT COOPERATIVE AGREEMENT WORK PLAN**

**FOR**

*Assessment of Riverfront Redevelopment Site, City of Troutdale, OR*

*Revised September 6, 2012*

**Submitted by**

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# 1. INTRODUCTION

## 1.1 Project Description Goals and Objectives

The overall goals of the Project are to economically redevelop this brownfield site and resolve the remaining remedial investigation issues by conducting environmental site assessments and risk assessments, cleanup planning and redevelopment planning at the Troutdale Riverfront Redevelopment Site on the banks of the Sandy River in the City of Troutdale, Oregon. The Troutdale Riverfront Redevelopment Site consists of two properties; one is a former sanitary sewer plant owned by the City, and the other property is owned by a private company, Eastwind Development LLC. A map delineating the properties is included as Attachment 1. This site-specific assessment project, funded through the EPA Cooperative Agreement, addresses the Eastwind Property at 302 NW 257$^{th}$ Way, Troutdale, Oregon, 97060 (Tax Lots 100 and 600).

Brownfield sites in Troutdale have placed a hardship on our economy and impede restoration of the ecological environment. The Troutdale Riverfront Redevelopment Site was a former slaughterhouse and rendering plant site and is the last unremediated industrial brownfield site on the bank of the Sandy River, a National Wild and Scenic River and home to a number of salmonid species listed as threatened under the Endangered Species Act.

The Targeted Brownfield Assessment conducted by EPA demonstrated that the Eastwind property was contaminated while the City-owned parcel showed little impact from historic operations. The Eastwind property contains arsenic, volatile organic compounds (VOCs), naphthalene, and chlorinated pesticides have been detected above screening levels in subsurface soil. Dichlorodiphenyldichloroethylene (DDE), dichlorodiphenyltrichloroethane (DDT), and bis(2-ethylhexyl)phthalate have been detected above screening levels in surface soil and groundwater contains concentrations of heavy metals, VOCs, and semi-volatile organic compounds (SVOCs) above screening levels. Animal carcass material buried on-site contains concentrations of naphthalene and arsenic above screening levels.

Through the Cooperative Agreement (CA), the City of Troutdale will complete assessment of the nature and extent of contaminants of concern (COCs) in soils and groundwater, and with the COC data, perform a risk-assessment of COCs to human health and ecological receptors which will assist in moving the site towards obtaining a No Further Action (NFA) determination from the Oregon Department of Environmental Quality (DEQ).

Concurrent with the assessment work, the City will conduct redevelopment planning and community involvement to evaluate four redevelopment scenarios building on previous public planning processes and most recently refined through a cooperative effort of EPA and the US German Bilateral Working Group (the Bilateral), a U.S. EPA and German Federal Ministry of Education and Research cooperative group that shares information and evaluates new solutions and tools for the redevelopment of brownfields. The Bilateral is managed through EPA's Office of Research and Development (ORD) in Cincinnati, Ohio. From 2010 to 2012, German participants from the Bilateral worked with Troutdale to test a new web-based analytical tool which integrates soil and groundwater contamination data with planning and land use

information to create three-dimensional representations of potential development scenarios based on relative risk reduction of each development concept. Through this process, several development scenarios were created and presented in a Roundtable at the Brownfields 2011 Conference in Philadelphia, Pennsylvania.

Most recently, Eastwind Development LLC and the City have developed the Troutdale Riverfront Renewal Plan – an urban renewal district voter-approved plan for the site, and the Eastwinds Concept Plan – a redevelopment prospectus prepared by Eastwind Development, LLC. Each plan creates a concept for redevelopment that includes a hotel and commercial center and a trail along the river that will link to the regional trail system and a greenway. The EPA Brownfields Assessment grant will help us move the site toward redevelopment and implement these plans - which in turn will create jobs, return a contaminated brownfield site to productive, economic use, increase our tax base, create access for local citizens and visitors to the Sandy River, and improve the quality of life for everyone in Troutdale.

## 1.2 Organizational Structure and Responsibilities

The City of Troutdale is the grant recipient. Incorporated in 1907, Troutdale is a small city of approximately 16,000 residents located near the confluence of the Sandy and Columbia Rivers within the easternmost boundary of the Portland, Oregon Metropolitan area. The programmatic and accounting requirements of the grant will be undertaken by two key City staff:

**City Manager (CM):** Mr. Craig Ward has over 30 years of government and administrative and planning experience. He has been the City Manager for Troutdale for about one year. Mr. Ward has successfully overseen much of the environmental work at the site. As City Manager, Mr. Ward has authority to conduct all aspects of the grant, and delegate that authority to the Community Development Director and contractors needed to assist with the four Project tasks.

**Community Development Director (CDD)/ Planning/Community Outreach Coordinator (PCC):** Rich Faith currently serves as Troutdale's Community Development Director. Mr. Faith has over 30 years of land use planning experience and has been with the City for more than 17 years. Mr. Faith specializes in putting on public meetings and will be a vital asset for community outreach. Mr. Faith currently oversees the State of Oregon (Business Oregon) assessment grant on the Project, and will be the City's lead with the Project Director (PD) on this grant. As Planning/Community Outreach Coordinator (PCC), the CDD will also be responsible for developing and implementing community involvement and outreach, to conduct redevelopment planning, identifying and obtaining leveraged support and funding from project stakeholders and preparing reports to the City and stakeholders on the planning and redevelopment process.

Due to the small size of the City and budget constraints, certain tasks under the grant will be carried out by contractors, each of whom will report directly to Mr. Faith. The contractor positions needed to successfully implement the grant include the following:

**Environmental Professional (EP):** The Environmental Professional will be responsible for performing the remedial investigation to determine nature and extent of contamination, and for

performing the data collection and analysis to support the ecological and human health risk assessments. The EP will also prepare the QAPP, SAP, HASP and will assist the City and the Project Director in public outreach and in preparing reports detailing the results of the assessment work.

**Project Director (PD):** The Project Director will be responsible to manage the performance of work under the grant and support the CDD to ensure all tasks are performed in compliance with the CA and all reporting is completed and delivered to DEQ and EPA in a timely manner. The PD will also perform regulatory analysis and support for developing the risk assessment scope of work in context of applicable laws and regulations for the human health and ecological risks, for interpreting and reporting the results to City Council and the Urban Renewal Agency, for conducting a renewable energy analysis; conducting cleanup planning including working with DEQ VCP staff to address requirements for an NFA determination, maintain and manage communication with EPA and DEQ and be the lead contact for the Project reporting to CDD, and assist in coordination of contractors to ensure the timely performance of all required tasks as agreed with EPA.

The services of the Environmental Professional and Project Director will be procured in accordance with City of Troutdale requirements and in compliance with state and federal laws including 40 CFR 31.36.

Project Tasks will be carried out in the following manner:

- **Task 1**: Project Management and Reporting will be carried out by CDD with assistance from the PD.
- **Task 2**: Public Involvement will be carried out by CDD/PCC and the EP.
- **Task 3**: Site Assessment and Characterization will be carried out by the EP and PD.
- **Task 4:** Risk Assessment and Cleanup Planning will be carried out by the EP and PD.
- **Task 5**: Feasibility Analysis and Redevelopment Planning will be carried out by the PD and EP, with support from the CDD/PCC

## 1.3 Project Outputs and Outcomes

Based on the City's and the Project team's experience with past Cooperative Agreements, the **outputs** expected from this grant include developing the scope of work for, conducting and completing nature and extent assessments for COCs at the site, including the required Quality Assurance Project Plans (QAPP's), Health and Safety Plans (HASP's), Sampling and Analysis Plans (SAP's), and Endangered Species Act (ESA) and National Historic Preservation Act (NHPA) impact analysis; preparing and conducting human health and ecological risk assessments in accordance with State of Oregon DEQ risk assessment regulations and guidelines; and conducting an Analysis of Brownfield Cleanup Alternatives (ABCA) or equivalent Oregon analysis of remedial action alternatives; and preparing reports on these subtasks. These activities and reports will be reviewed by EPA and DEQ, and integrated into the planning and

redevelopment work to be considered by DEQ in the determination of No Further Action on the site. These activities will contribute substantially to the sustainable reuse and redevelopment of the Troutdale Riverfront Redevelopment Site, and the City will report on the progress of these outputs in its quarterly reports to EPA.

The **outcomes** that will be measured and reported on in the quarterly and final reports and in EPA's Assessment, Cleanup, and Redevelopment Exchange System (ACRES) tracking system. will include acres and contaminants assessed, risk exposure pathways evaluated and risk screening levels analyzed, other funding leveraged, acres of greenspace/open space assessed and created, square feet of commercial space allocated and other key public benefits, as appropriate.

## 2. PROJECT TASKS DESCRIPTIONS

## 2.1 TASK 1 – PROJECT MANAGEMENT

**$18,500** EPA funds are budgeted for this task. The CDD and PD will perform project management and report to DEQ VCP and EPA as required to implement and manage the Project under the CA.

### 2.1.1 Project Coordination

**$2,000** EPA funds are budgeted for this subtask. CDD staff will perform those activities necessary to manage the Project in accordance with the work plan and all required statutes, circulars, and terms and conditions, including establishment and maintenance of necessary CA records and files. Financial management, consultant and project oversight and attendance at necessary Project meetings will be conducted by CDD staff.

Objective:
Properly manage the CA per EPA requirements

Lead:
CDD, sublead PD (see subtask 2.1.6).

Cost/Type of Funds:
Hazardous substances; $2,000 for an estimated 39 hours of CDD staff time at an estimated $51 an hour ($34/hour salary plus $17/hour benefits in 2012 dollars).

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:
- Submit final CA package to EPA by August 24, 2012.
- Provide quarterly report updates on project management activities

### 2.1.2 Project Reporting

**$2,000** EPA funds are budgeted for this subtask. CDD with assistance from PD will prepare and submit required reports and forms, including quarterly and final progress reports, Federal

Financial Reports (FFR), Disadvantaged Business Enterprises (DBE) forms as appropriate.

Objective:
Submit required reports, forms and other information on time.

Lead:
CDD, sublead PD.

Cost/Type of Funds:
Hazardous substances; $2,000 for an estimated 39 hours of CDD staff time at an estimated $51 an hour ($34/hr salary plus $17/hr benefits in 2012 dollars).

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:

- Submit quarterly progress reports within 30 days of the end of each federal fiscal quarter.
- Submit DBE forms at least semiannually.
- Submit final Federal Financial Report (FFR) within 90 days of the end of the grant project/budget periods.
- Submit final performance report within 90 days of the end of grant project/budget periods. Obtain acceptance of quarterly reports, DBE forms, FFRs and other information by EPA quarterly or annually, as appropriate.
- Submit updates to the ACRES database as necessary

### 2.1.3 Staff Training/Travel

**$3,400** EPA funds are budgeted for this task. CM and CDD will attend one national and one regional brownfields conference over the course of the CA, which may include EPA's national brownfields conference in Atlanta, GA, the National Association for Local Government Environmental Professionals (NALGEP) Brownfields Communities Network (BCN) Summit and the Northwest Environmental Business Council's (NEBC) Northwest Environmental Conference in Oregon. Attendance at the conferences will enable staff to keep current on the newest and best practices concerning brownfields, to network with other brownfields professionals around the country and to share successes and lessons learned from our Brownfields Program with the wider brownfields community.

Objective:
Attend regional and/or national brownfields conferences to keep current on best practices and share lessons learned.

Lead:
CDD and sublead CM.

Cost/Type of Funds:
Hazardous substances; $3,400 for CM, CDD, and PD to attend two conferences at an average cost of $1,700 each person. Travel cost estimates are based on an average of costs of attending similar conferences in 2012.

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:
- CM and CDD staff will attend one regional and one national brownfields conferences, dates to be determined.
- Provide quarterly report updates on staff training/travel.

### 2.1.4 Contractor Procurement

**$1000** EPA funds are budgeted for this subtask. This task includes preparing and conducting the procurement process in accordance with the City of Troutdale's procurement procedures and with 40 CFR Part 31 Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments. Any renewals of the contracts and/or future procurement will also be done in accordance with these procedures and requirements.

Objective:
Procure contractors in accordance with City of Troutdale and EPA procurement requirements.

Lead:
CDD.

Cost/Type of Funds:
Hazardous substances; $1,000 for an estimated 20 hours of CDD staff time at an estimated $51 an hour ($34/hr salary plus $17/hr benefits in 2012 dollars).

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:
- Submit copy of contract scope of work for each contractor to EPA in first quarter of CA.
- Extend contracts with consultants for one year by the date the contract is signed and for one year after that, as appropriate.

### 2.1.5 Final Performance Report

**$1500** EPA funds are budgeted for this subtask. CDD staff, with assistance from the PD and EP, will prepare and submit a final performance report within 90 calendar days after the expiration or termination of the award. The report will cover the entire project period and may include before and after photos of the assessment sites. The report will also address lessoned learned in implementing the brownfields assessments and successes achieved.

Objective:
Submit required final performance report on time.

Lead:
CDD; sublead PD.

Cost/Type of Funds:
Hazardous substances; $1,500 for an estimated 29 hours of CDD staff time at an estimated $51 an hour ($34/hr salary plus $17/hr benefits in 2012 dollars).

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:

- Submit final performance report within 90 calendar days after the expiration or termination of the award.
- Obtain acceptance of final performance report by EPA.

### 2.1.6 Project Director – Contractor

**$8,600** EPA funds are budgeted for this subtask. CDD staff will contract for a Project Director to assist the CDD to oversee and perform the day-to-day tasks of the grant, to manage and oversee the performance of the EP and insure timely and complete deliverables from the EP consistent with the CA, to review draft documents prepared by EP, and CDD/PCC and assist in preparing Public Involvement materials and conducting public meetings, and help draft and finalize all project reporting.

PD will also attend attend one national and one regional brownfields conference over the course of the CA, which may include EPA's national brownfields conference in Atlanta, GA, the National Association for Local Government Environmental Professionals (NALGEP) Brownfields Communities Network (BCN) Summit and the Northwest Environmental Business Council's (NEBC) Northwest Environmental Conference in Oregon. Attendance at the conferences will enable PD to keep current on the newest and best practices concerning brownfields, to network with other brownfields professionals around the country and to share successes and lessons learned from our Brownfields Program with the wider brownfields community.

Objective:
Assist the CDD to properly manage the CA per EPA requirements; prepare risk assessment documents and assist in evaluating and preparing ABCA or state equivalent for DEQ VCP. Attend regional and/or national brownfields conferences to keep current on best practices and share lessons learned.

Lead:
PD selected through required City processes in compliance with 40 CFR Part 31; sublead CDD.

Cost/Type of Funds:
Hazardous substances; $7000 for an estimated 46.7 hours of Project Director contractor time at an average of $150 an hour; $1600 for travel and training.

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:

- Assist CDD in drafting quarterly reports 30 days before submittal date
- Assist EP in all Task 3 work and deliverables, and lead on subtasks 2.4.3, 2.4.5, and 2.4.6.
- Assist CDD in preparing final performance report within 90 calendar days after the expiration or termination of the award.
- Assist CDD obtain acceptance of final performance report by EPA.

## 2.2 TASK 2 – PUBLIC INVOLVEMENT

**$8,000** EPA funds are budgeted for this task. CDD/ PCC will perform public involvement, consistent with the Assessment Grant Proposal submitted and the Cooperative Agreement Terms and Conditions, to ensure that community concerns are considered in assessment planning and execution, and that the public is kept informed of project progress and results and given the opportunity to be involved with CDD's projects. This task will build on and leverage the work and support previously provided to the project by civic and community groups, state and local government entities who are involved with and support the redevelopment of the site, including the West Columbia Gorge Chamber of Commerce, the Troutdale Historical Society, the 40 Mile Loop Land Trust, the Oregon Department of Transportation, Multnomah County Transportation Department, and Metro.

### 2.2.1 Public Outreach and Involvement

**$5,500** EPA funds are budgeted for this subtask.

*Community Outreach Plan* – We will prepare and implement a Community Outreach and Education Plan within six months of award. The plan will detail the actions that will be taken to involve stakeholders in site selection for assessments, cleanup decisions, or reuse planning. The plan will also define outcomes and outputs for public outreach.

*Public Meetings* - CDD/PCC will conduct a minimum of two public meetings. The first public meeting will be held to announce award of the grant and plans to move forward. At this meeting, we will also include discussions of future development and present known environmental information and community planning efforts, including redevelopment scenarios refined with the US German Bilateral Working Group, to the community to garner input. The second meeting will be to describe the findings of the assessment activities and discuss how these finding may impact the various redevelopment scenarios, including a presentation of the redevelopment scenarios using the web-based "Optirisk" tool applied by the US German Bilateral Working Group. At these meetings, we hope to educate the public about brownfields and to gain an understanding of issues of concern to attendees. We will also discuss the project and status updates at each regularly scheduled council meeting that is held once a month. All public meetings will accommodate hearing and sight concerns as needed through large print publications, sign language interpretation, and use of ADA accessible facilities. The English

language is predominantly used in Troutdale, and materials will be developed in English. If a need is identified, we will arrange for other language accommodations.

Objective:
Encourage public involvement in assessment and redevelopment planning, keep public informed of risks evaluated and options for remedial action and opportunities for institutional and engineering controls based on redevelopment options; seek public input in the location and design of open space and recreational components of the redevelopment plans; providing contacts and media alternatives to keep the public informed and involved in a manner that is helpful and easily accessible to the public.

Lead:
PCC, with support from PD.

Cost/Type of Funds:
Hazardous substances; $5,500 for an estimated 36.7 hours of PCC time at an estimated $150 an hour.

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:
- Contact targeted stakeholder groups to announce results of assessment and solicit input and ideas for redevelopment concepts.
- Meetings with stakeholder groups/public meetings/presentations.
- Provide quarterly report updates on public outreach and involvement activities.

### 2.2.2 Project Updates and Other Public Information

**$2500** EPA funds are budgeted for this subtask. This subtask includes a variety of public information tools and techniques designed to reach the maximum number of stakeholders at the minimum cost.

*Newsletter, Fact Sheets, and Web Page* – The City will use electronic and print media to keep the public informed and involved in the Project. For print media, the city will use the Troutdale Champion, the city newsletter, to distribute information about the project to the community. The Troutdale Champion is published approximately six times a year and is distributed to all residents of the City. At the public meetings, the City will distribute fact sheets to help explain the goals and objectives of the assessment work and project. The fact sheets will also be placed at the City offices. Information about the brownfields assessment and redevelopment project will be placed on the City's website and updated on a quarterly basis, or more frequently as needed.

*News and Radio* - We have two main newspapers most residents in Troutdale read: The Gresham Outlook and The Oregonian. We will provide press releases to the newspapers and we will invite reporters to public meetings and other events. We will also use our local radio station, KPAM 860 AM as a way to publicize meetings and events.

Objective:
Share information on and receive feedback into assessment projects and the Brownfields Program.

Lead:
PCC, with support from PD.

Cost/Type of Funds:
Hazardous substances; $2,500 for an estimated 16.7 hours of PCC time at an estimated $150 an hour.

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:

- Prepare plain language fact sheet at beginning of project(s) (ongoing, dates to be determined as sites are selected) and submit to EPA with quarterly reports.
- Determine if non-English language materials are needed or desired by the public and prepare as needed.
- Prepare fact sheet at completion of project(s) (ongoing, dates to be determined as sites are selected) and submit to EPA with quarterly reports.
- Prepare additional fact sheets if needed due to delay or changes (ongoing, dates to be determined as sites are selected) and submit to EPA with quarterly reports.
- Post fact sheets to websites (ongoing, dates to be determined as sites are selected) and provide URLs of postings to EPA in quarterly reports.
- Provide quarterly report updates on project updates and other public information activities.

## 2.3 TASK 3 – SITE ASSESSMENT AND CHARACTERIZATION

**$118,300** EPA funds are budgeted for this task. The Site Characterization tasks are divided into the following subtasks: planning and conducting nature and extent of COC assessments, the preparation of the QAPP's, SAP's, and HASP. The Cleanup Planning subtasks include the preparation of a risk assessment plan based on the COC data collected during Site Characterization, collecting and analyzing data for evaluation of human health and ecological risk receptors and pathways and determining risk to each receptor based on applicable risk screening levels of DEQ VCP for each COC. Additional subtasks for Cleanup Planning include the preparation of ESA and NHPA evaluations and reports, and the ABCA or state equivalent and submitting to DEQ VCP for an NFA determination.

### 2.3.1 Site Characterization – Assessment of Nature and Extent of Contamination

**$107,850** EPA funds are budgeted for this subtask. It is estimated that three sampling and analysis plans will be produced and implemented for three distinct areas of the site and phases of the work, including 1) the buried animal carcass area; 2) sitewide groundwater investigation; and 3) riparian/open space area. Each area requires different sampling techniques and has different contaminants of concern that will be assessed in subtask 2.3.2 risk assessment once the data for

this subtask is reported and verified. The delineation of the buried animal carcass area will include borings, field staff time, laboratory analysis, data interpretation and report preparation. Groundwater characterization will include the installation of one or more monitoring wells, monitoring of the new well(s) and monitoring two existing wells. Direct push technology cannot be used at the Site for groundwater sampling due to the subsurface materials so more expensive drilling techniques (sonic or hollow-stem auger) must be used. The monitoring wells will be monitored semi-annually for a minimum of 18 months. The riparian area will require determination of hydrogeology to assess migration potential for upland contamination in soils and groundwater and analysis of surface and shallow subsurface contamination to determine potential human and ecological exposure pathways. The specifics of the assessment work described above will be presented to EPA for review and approval through the Quality Assurance Project Plan (QAPP).

Objective:
Perform environmental assessment work on site to determine nature and extent of contamination.

Leads:
EP, sublead PD.

Cost/Type of Funds:
Hazardous substances; $40,000 for an estimated 400 hours of EP contractor time at an estimated $100 an hour. $6000 for an estimated 40 hours of PD contractor time at an estimated $150 an hour. $61,850 for subcontractor fees including drillers and analytical laboratories.

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:
- Prepare Site Access Agreement and provide to property owner prior to performing assessments.
- Conduct sampling and analysis of samples.
- Prepare assessment reports for each area including groundwater.
- Provide quarterly report updates on assessment activities.

### 2.3.2 ESA and NHPA Requirements

**$2,950** in EPA funds are budgeted for this subtask. PD and EP will provide information to EPA to help it fulfill EPA's requirements under the Endangered Species Act Section 7 (ESA) and the National Historic Preservation Act Section 106 (NHPA). The information will include the location of the project, any threatened or endangered species or habitat which may be affected by the project, whether a site is considered to be of concern by the State Historic Preservation Officer (SHPO), a list of Tribes who may believe the site or project could disturb cultural resources and EP's evaluation as to whether its plans could have adverse effects on endangered species or cultural resources.

Objective:
Identify the ESA and/or NHPA impacts, if any, of each assessment and provide information on

the impacts to EPA.

Leads:
EP, sublead PD.

Cost/Type of Funds:
*Hazardous substances*: $2,050 for an estimated 20.5 hours of EP contractor time at an estimated $100 an hour. $900 for an estimated 6 hours of PD contractor time at an estimated $150 an hour.

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:
- EP and PD provide ESA/NHPA information to EPA 4-6 weeks prior to performance of any sampling.
- Provide quarterly report updates on ESA and NHPA activities.

### 2.3.3 Quality Assurance Project Plan (QAPP), Sampling and Analysis Plan (SAP) and Health and Safety Plan (HASP)

**$7,500** EPA funds are budgeted for this subtask. A site-specific QAPP, SAP and HASP will be prepared and submitted to EPA for review and concurrence 4-6 weeks prior to performance of any sampling.

Objective:
Produce and follow QAPPs and HASPs for the sites selected.

Leads:
EP, sublead PD.

Cost/Type of Funds:
*Hazardous substances*: $5,700 for an estimated 57 hours of EP contractor time at an estimated $100 an hour. $1,800 for an estimated 12 hours of PD contractor time at an estimated $150 an hour.

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:
- Prepare and submit draft QAPPs, SAPs and HASP to EPA by 4-6 weeks prior to performance of any sampling (ongoing, dates to be determined as sites are selected).
- Prepare and submit revised QAPPs, SAPs and HASPs as needed and finalize, prior to performance of sampling (ongoing, dates to be determined as sites are selected).
- Provide quarterly report updates on QAPP, SAP and HASP activities.

## 2.4 TASK 4 - RISK ASSESSMENT AND CLEANUP PLANNING

**$27,200** EPA funds are budgeted for this task. The EP and PD will perform risk assessment and cleanup planning.

### 2.4.1 Human Health and Ecological Risk Assessment

**$18,000** EPA funds are budgeted for this subtask. Oregon cleanup law and regulations implemented by DEQ emphasize risk based decision making for cleanup and redevelopment of contaminated sites. The risk assessment will require site data collected in Task 2.3.1 to be screened using risk based concentrations (RBC's) from applicable DEQ guidance. Both human and ecological receptors will be identified and evaluated, along with potential pathways for the COC's to reach the receptors. At this stage, the public input on redevelopment scenarios will be integrated into the risk assessment to determine the potential for risk reduction or elimination of pathways to receptors by the strategic placement of redevelopment components (e.g., buildings, parking lots, impervious trail surface, phytoremediation, etc.) and incorporation of engineering and institutional controls. Results will be presented to the public for further input and presented to DEQ VCP for evaluation.

Objective:
Conduct risk assessment and prepare documentation to support risk-based closure.

Leads:
PD and EP.

Cost/Type of Funds:
*Hazardous substances*: $13,500 for an estimated 135 hours of EP contractor time at an estimated $100 an hour. $4,500 for an estimated 30 hours of PD contractor time at an estimated $150 an hour.

### 2.4.2 Analysis of Brownfields Cleanup Alternatives

**$9,200** EPA funds are budgeted for this subtask. PD and EP will prepare Analyses of Brownfields Cleanup Alternatives (ABCAs) or equivalent State-required documents, as needed. The ABCAs will summarize information about the site and contamination (i.e., exposure pathways, contaminant sources, types and levels of contamination, etc.); cleanup standards; applicable laws; alternatives considered (at least two, evaluated in terms of effectiveness, implementability and cost); and the proposed cleanup plan. The ABCA will also include the results of the Risk Assessment and the analysis and documentation to support a risk-based closure and No Further Action determination for the site through the DEQ VCP. Draft ABCAs will be submitted to EPA and to DEQ's VCP Project Manager to ensure that the analysis will ultimately be acceptable to the State.

Objective:
Successfully develop ABCAs or equivalent State required documents that meet the requirements of the DEQ VCP.

Leads:

PD and EP.

Cost/Type of Funds:
*Hazardous substances*: $6,800 for an estimated 68 hours of EP contractor time at an estimated $100 an hour. $2,400 for an estimated 16 hours of PD contractor time at an estimated $150 an hour.

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:
- Develop draft ABCA or State-required equivalent and submit to EPA 4-6 weeks prior to submittal to DEQ VCP.
- Submit draft ABCA to DEQ VCP project manager for review and approval prior to obtaining NFA determination.
- Provide quarterly report updates on ABCA activities.

## 2.5 TASK 5 - FEASIBILITY ANALYSIS AND REDEVELOPMENT PLANNING

**$28,000** EPA funds is budgeted for this task. This task includes updating the detailed conceptual site plans produced by the City and the citizens of Troutdale based on the results of the site characterization and risk assessment and the refinement of these plans produced by the US German Bilateral Working Group; refining and finalizing the conceptual site plans through the public involvement process and public meetings; developing a detailed interim land use plan based on the assessment results and redevelopment options, and evaluating and securing funding for completion of the redevelopment.

### 2.5.1 Prepare Conceptual Site Plans

**$8,050** EPA funds are budgeted for this subtask.

Objective:
Update existing site plans based on results of site characterization, risk assessment, and public involvement processes.

Leads:
PCC; sublead PD.

Cost/Type of Funds:
*Hazardous substances*: $8,050 for an estimated 53.7 hours of PCC and PD contractors' time at an estimated $150 an hour.

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:
- Prepare updated conceptual site plan based on input obtained through public meetings.
- Prepare interim land use plan based on updated conceptual site plan and public input.
- Provide quarterly report updates on redevelopment plans.

### 2.5.2 Prepare Feasibility Plans

**$6,450** EPA funds are budgeted for this subtask. Feasibility plans will incorporate the integrated environmental and planning efforts with a market analysis of estimated costs, returns on investment, liabilities and related inputs. Plans and report will assist the City in attracting interest from potential developers to the site and will leverage additional support from the State of Oregon, Business Oregon to market the site.

Objective:
Prepare sitewide development feasibility plan based incorporating updated conceptual site plans and results of assessment and risk analysis.

Leads:
PCC; sublead PD.

Cost/Type of Funds:
*Hazardous substances*: $6,450 for an estimated 43 hours of contractors time at an estimated $150 an hour.

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:
- Prepare sitewide feasibility plan integrating environmental data and redevelopment options from updated conceptual site plan based on input obtained through public meetings.
- Present feasibility plan to public and integrate input into final feasibility analysis.
- Provide quarterly report updates on feasibility analysis.

### 2.5.3 Analyze Potential for Renewable Energy Applications

**$13,500** EPA funds are budgeted for this subtask.

Objective:
Evaluate potential for energy efficiency and renewable energy generation and integrate into site planning process.

Leads:
PD.

Cost/Type of Funds:
*Hazardous substances*: $13,500 for an estimated 90 hours of PD contractor time at an estimated $150 an hour.

Project Milestones/Deliverables & Estimated Submittal/Completion Dates:
- Prepare preliminary assessment of site resources and efficiency potential of conceptual site

plan.
- Survey technology vendors and propose options to public at public meeting.
- Provide quarterly report updates on energy-related activities; present findings and recommendations in Final EPA Report.

## 3. SCHEDULE AND DELIVERABLES

| **DUE DATE** (for grant awarded 10/01/12) | **ITEM** | **Send to:** | | | |
|---|---|---|---|---|---|
| | | **EPA PO** | **STATE** | **EPA GRANTS** | **EPA FINANCE** |
| | | | | | |
| Before fieldwork begins | QAPP / Health and Safety Plan | X | X | | |
| Before field work begins | ESA/NHPA letter | X | | | |
| As Needed | Requests for Reimbursement – see Administrative Terms & Conditions | | | | X |
| Month 1 | Property Profile Form entered in ACRES and updated as needed;<br>Solicitation for hiring consultants issued | X | | | |
| Month 2 | Public Involvement Plan (PIP) as applicable<br>Process for hiring consultants completed | X | | | |
| Month 2 | Fact sheet - project starting | X | | | |
| Month 3 | Public Meeting – Kick off | X | X | | |
| Month 3<br>12/31/13 | Submit contract scope of work for each contractor | X | X<br>(copy) | | |

| DUE DATE (for grant awarded 10/01/12) | ITEM | Send to: | | | |
|---|---|---|---|---|---|
| | | EPA PO | STATE | EPA GRANTS | EPA FINANCE |
| Month 4<br>January 2013 | Quarterly Progress Report (QPR) 1 for period 10/1/12-12/31/12<br>- Public outreach<br>- Assessment activities<br>- QAPP, SAP & HASP activities<br>- ESA & NHPA activities<br>- ABCA activities<br>- Redevelopment Plans<br>- Feasibility analysis<br>- Energy-related activities<br>- Plain language fact sheet, if applicable. | X | | | |
| Month 5 | Assessment work begins | X | | | |
| Month 7<br>April 2013 | QPR 2 for period 1/1/13 - 3/31/13<br>- Public outreach<br>- Assessment activities<br>- QAPP, SAP & HASP activities<br>- ESA & NHPA activities<br>- ABCA activities<br>- Redevelopment Plans<br>- Feasibility analysis<br>- Energy-related activities<br>- Plain language fact sheet, if applicable. | X | | | |
| Month 7<br>4/30/13 | DBE Report for period ending 3/31/13 | X (copy) | | X | |

| DUE DATE (for grant awarded 10/01/12) | ITEM | Send to: | | | |
|---|---|---|---|---|---|
| | | EPA PO | STATE | EPA GRANTS | EPA FINANCE |
| Month 10<br>July 2013 | QPR 3 for period 4/1/13-6/30/13<br>- Public outreach<br>- Assessment activities<br>- QAPP, SAP & HASP activities<br>- ESA & NHPA activities<br>- ABCA activities<br>- Redevelopment Plans<br>- Feasibility analysis<br>- Energy-related activities<br>- Plain language fact sheet, if applicable. | X | | | |
| Month 13<br>October 2013 | QPR 4 for period 7/1/13-9/30/13<br>- Public outreach<br>- Assessment activities<br>- QAPP, SAP & HASP activities<br>- ESA & NHPA activities<br>- ABCA activities<br>- Redevelopment Plans<br>- Feasibility analysis<br>- Energy-related activities<br>- Plain language fact sheet, if applicable. | X | | | |
| Month 13<br>10/30/13 | DBE Report for period ending 9/30/13 | X (copy) | | X | |

| DUE DATE (for grant awarded 10/01/12) | ITEM | Send to: | | | |
|---|---|---|---|---|---|
| | | EPA PO | STATE | EPA GRANTS | EPA FINANCE |
| Month 16<br>January 2014 | QPR 5 for period 10/1/13-12/31/13<br>- Public outreach<br>- Assessment activities<br>- QAPP, SAP & HASP activities<br>- ESA & NHPA activities<br>- ABCA activities<br>- Redevelopment Plans<br>- Feasibility analysis<br>- Energy-related activities<br>Plain language fact sheet, if applicable. | X | | | |
| Month 19<br>April 2014 | QPR 6 for period 1/1/14-3/31/14<br>- Public outreach<br>- Assessment activities<br>- QAPP, SAP & HASP activities<br>- ESA & NHPA activities<br>- ABCA activities<br>- Redevelopment Plans<br>- Feasibility analysis<br>- Energy-related activities<br>- Plain language fact sheet, if applicable. | X | | | |
| Month 19<br>4/30/14 | DBE Report for period ending 3/31/14 | X (copy) | | X | |

| **DUE DATE** (for grant awarded 10/01/12) | **ITEM** | **Send to:** | | | |
|---|---|---|---|---|---|
| | | **EPA PO** | **STATE** | **EPA GRANTS** | **EPA FINANCE** |
| Month 22<br>July 2014 | QPR 7 for period 4/1/14-6/30/14<br>- Public outreach<br>- Assessment activities<br>- QAPP, SAP & HASP activities<br>- ESA & NHPA activities<br>- ABCA activities<br>- Redevelopment Plans<br>- Feasibility analysis<br>- Energy-related activities<br>- Plain language fact sheet, if applicable. | X | | | |
| Month 25<br>Oct. 2014 | QPR 8 for period 7/1/14-9/30/14<br>- Public outreach<br>- Assessment activities<br>- QAPP, SAP & HASP activities<br>- ESA & NHPA activities<br>- ABCA activities<br>- Redevelopment Plans<br>- Feasibility analysis<br>- Energy-related activities<br>- Plain language fact sheet, if applicable. | X | | | |
| Month 25<br>10/30/14 | DBE Report for period ending 9/30/14 | X (copy) | | X | |

| **DUE DATE** (for grant awarded 10/01/12) | **ITEM** | **Send to:** | | | |
|---|---|---|---|---|---|
| | | **EPA PO** | **STATE** | **EPA GRANTS** | **EPA FINANCE** |
| Month 28<br>Jan. 2015 | QPR 9 for period 10/1/14-12/31/14<br>- Public outreach<br>- Assessment activities<br>- QAPP, SAP & HASP activities<br>- ESA & NHPA activities<br>- ABCA activities<br>- Redevelopment Plans<br>- Feasibility analysis<br>- Energy-related activities<br>- Plain language fact sheet, if applicable. | X | | | |
| Month 31<br>April 2015 | QPR 10 for period 1/1/15-3/31/15<br>- Public outreach<br>- Assessment activities<br>- QAPP, SAP & HASP activities<br>- ESA & NHPA activities<br>- ABCA activities<br>- Redevelopment Plans<br>- Feasibility analysis<br>- Energy-related activities<br>- Plain language fact sheet, if applicable. | X | | | |
| Month 31<br>4/30/15 | DBE Report for period ending 3/31/15 | X (copy) | | X | |

| DUE DATE (for grant awarded 10/01/12) | ITEM | Send to: | | | |
|---|---|---|---|---|---|
| | | EPA PO | STATE | EPA GRANTS | EPA FINANCE |
| Month 34<br>July 2015 | QPR 11 for period 4/1/15-6/30/15<br>- Public outreach<br>- Assessment activities<br>- QAPP, SAP & HASP activities<br>- ESA & NHPA activities<br>- ABCA activities<br>- Redevelopment Plans<br>- Feasibility analysis<br>- Energy-related activities<br>- Plain language fact sheet, if applicable. | X | | | |
| Month 37<br>Oct. 2015 | QPR 12 for period 7/1/15-9/30/15<br>- Public outreach<br>- Assessment activities<br>- QAPP, SAP & HASP activities<br>- ESA & NHPA activities<br>- ABCA activities<br>- Redevelopment Plans<br>- Feasibility analysis<br>- Energy-related activities<br>- Plain language fact sheet, if applicable. | X | | | |
| Month 36 | Fact Sheet - Assessment results | X | | | |
| Months 36 – 39 | Final Federal Financial Report (FFR) (SF425) & Final Drawdown<br>For forms & more information, visit: http://www.epa.gov/ocfo/finservices/forms.htm | X (copy) | | X (copy) | X |

| DUE DATE (for grant awarded 10/01/12) | ITEM | Send to: | | | |
|---|---|---|---|---|---|
| | | EPA PO | STATE | EPA GRANTS | EPA FINANCE |
| Months 36 – 39 | Closeout: Final Performance Report with Summary Fact Sheet, Photos, and Lessons Learned | X | | | |
| Month 37 10/30/15 | DBE Report for period ending 9/30/15 | X (copy) | | X | |

## 4. BUDGET

### 4.1 Budget Table – Hazardous Substances

| Budget Categories | Project Tasks | | | | | |
|---|---|---|---|---|---|---|
| | Task 1; Project Management and Reporting | Task 2: Community Outreach | Task 3: Site Assessment and Characterization | Task 4: Risk Assessment and Cleanup Planning | Task 5: Feasibility Analysis and Redevelopment Planning and | **Total** |
| Personnel | $4,318 | | | | | **$4,318** |
| Fringe[1] | $2,157 | | | | | **$2,157** |
| Travel | $2,833 | | | | | **$2,833** |
| Equipment | | | | | | |
| Other | $590 | | | | | **$590** |
| Contractual[2] | $8,600 | $8,000 | $118,300 | $27,200 | $28,000 | **$190,100** |
| **Total** | **$18,500** | **$8,000** | **$118,300** | **$27,200** | **$28,000** | **$200,000** |

[1]Troutdale's Fringe Benefit Rate is 50%. [2] The City of Troutdale will comply with the City of Troutdale's procurement procedures and 40 CFR 31.36.

### 4.2 Budget Narrative

#### 4.2.1 BUDGET DETAIL BY TASK: Hazardous Substances

**Task 1: Project Management and Reporting - $18,500 Total**

CDD will perform project management and reporting as required to implement and manage this project under the CA, including making sure all requirements for reporting and contractor procurement are met. **$6,500** in funds will be used for an estimated 127 hours of CDD staff time at $105 an hour to perform portions of the project management and reporting subtasks. CDD time will be supported by **$7000** of EPA funds for an estimated 46.7 hours of time contracted for the Project Director at $150 an hour.

As a part of this task, the CDD, CM and PD will attend one national and one regional brownfields conferences over the course of the CA, which may include EPA's national brownfields conference in Atlanta, GA, the National Association for Local Government Environmental Professionals (NALGEP) Brownfields Communities Network (BCN) Summit or the Northwest Environmental Business Council (NEBC) Northwest Environmental Conference. Attendance at the conferences will enable staff to keep current on the newest and best practices concerning brownfields, to network with other brownfields professionals around the country and to share successes and lessons learned from our Brownfields Program with the wider brownfields community. $5,000 of EPA funds will support travel and training.

**Task 2: Public Involvement - $8,000 Total**

Community involvement and outreach will be conducted primarily by the PCC with support from the PD. PCC will contact community groups to share information on and receive feedback into the assessments, cleanup planning and redevelopment planning being conducted under the grant. These groups include West Columbia Gorge Economic Development Consortium, the US-German Bilateral Working Group, the Troutdale Chamber of Commerce, the 40 Mile Loop Trail Consortium, and other local stakeholders.

The work conducted under this Task will include the preparation and implementation of the Community Outreach and Education Plan, at least two public meetings, updates and information through newsletters, local media (both print, radio and television) and the Project Web Site. The **$8,000** will be used for an estimated 53.4 hours of PCC staff time at an estimated $150 an hour.

**Task 3: Site Assessment and Characterization - $118,300 total**

Site identification and technical assistance will be performed by contractors including the EP and PD, with support from CDD. The **$115,350** in funds will be used to pay EP an estimated $47,750 for an estimated 477.5 hours of contractor time at an average of $100 an hour, and the PD an estimated $8,700 for an estimated 58 hours of contractor time at an average of $150 an hour. The projected outputs for this task are for the EP and PD to

fully assess the nature and extent of COC's at the site to enable Risk Assessment and evaluation of Brownfield Cleanup Alternatives (ABCA) in Task 4.,

The EP consultant, with the assistance of the PD, will conduct the assessments and all subtasks listed under this task, including the required ESA and NHPA analyses; QAPPs and HASPs.

An estimated **$61,850** will be used for an estimated 618 person hours of geotechnical consultant and subconsultant services, analytical and drilling services at an average of $100 per hour . The actual costs of the assessments will include the costs of the required federal Endangered Species Act (ESA) and National Historic Preservation Act (NHPA) analyses.

**Task 4: Risk Assessment and Cleanup Planning - $27,200 total**

Risk assessment and cleanup planning will be performed by contractors, more specifically, the EP and PD. The **$27,200** in funds will be used to pay EP an estimated $20,300 for an estimated 203 hours of contractor time at an average of $100 an hour, and the PD an estimated $6,900 for an estimated 36 hours of contractor time at an average of $150 an hour.

Task 4 involves analyzing the data collected in Task 3 to first determine the risks to human health and ecological receptors (e.g., Sandy River riparian area), and then with the risk assessment completed, the pathways for exposures known and the assessment data compared against risk based screening concentrations, prepare an Assessment of Brownfield Cleanup Alternatives (ABCA) or state-required equivalent to evaluate the options for cleanup at the site that will eliminate, reduce or manage risks from soil and groundwater contamination. The projected outputs for this task are for the EP and PD to to design and conduct human health and ecological risk assessment and ABCA, and to use these reports to prepare the necessary documentation for DEQ's VCP to issue an NFA determination for the site.

**Task 5: Feasibility Analysis and Redevelopment Planning - $28,000 Total**

Feasibility Analysis and Redevelopment Planning will be conducted primarily by the PCC and PD. These costs include preparing a feasibility of renewable energy potential, both for on-site energy demand and offsite delivery to the grid; updating the detailed conceptual site plans based on the results of the COC assessment and the risk assessment; developing a detailed interim land use plan based on the assessment results, and evaluating and leveraging funding for completion of the redevelopment.

### 4.2.2 BUDGET DETAIL BY BUDGET CATEGORY: Hazardous Substances

**I. Personnel**

| Position/Title | Annual Salary | Total Hours | Amount | Total |
|---|---|---|---|---|
| Community Development Director (CDD) | $70,000/$34 hr | Approximately 127 hours | $4,318 | $4,318 |
| CDD as Planning/Community Outreach Coordinator | | Approximately 53.4 hours at an estimated $150 an hour | $8,000 | $8,000 |
| | Total Personnel | | | $12,318 |

**II. Fringe Benefits**

| | | |
|---|---|---|
| 50 % of Basic Salary | $2,159 | $2,159 |
| Includes retirement, health benefits, annual and sick leave and life insurance | | |
| **Total Personnel** | | $14,477 |

**III. Travel**

Out of State Travel

1. EPA Brownfields 2013 Conference
   Atlanta, GA

| | | |
|---|---|---|
| Airfare for CM and CDD ($821.50 x 2) | $1,643 | $_____ |
| Per diem lodging - 2 person x 3 nights x $120 | $720 | $_____ |
| Per diem meals/incidentals - 2 person x 2 full days x $50 | $200 | $_____ |
| Per diem meals/incidentals - 2 person x 2 75% days x $37.50 | $150 | $_____ |
| Ground transportation to and from airport x $60x2 | $120 | $_____ |
| Subtotal | | $_____ |
| Total Travel | | $2,833 |

## IV. Contractual

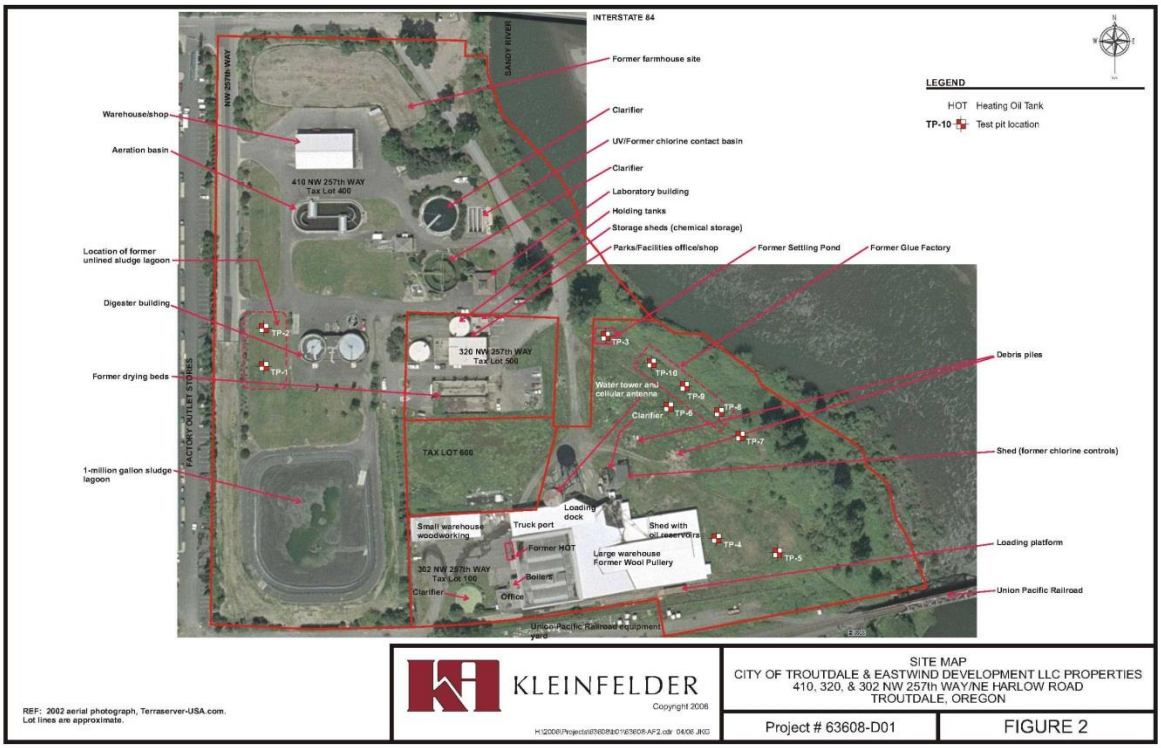
| | | Amount | Total |
|---|---|---|---|
| 1. | Consultant services for Project Management | $8,600 | $8,600 |
| | $7,000 for an estimated 46.7 hours of Project Director contractor time at an average of $150 an hour and $1600 for travel and training. | | |
| 2. | | | |
| 3. | Consultant services for Site Assessment and Characterization Consulting (all EP time & analytical costs based on contractor bids) | $118,300 | $118,300 |
| | a. Personnel hours | $56,450 | |
| | 1) *Site Characterization – Assessment of Nature and Extent of Contamination* - $46,000 total; $40,000 for an estimated 400 hours of EP time at an estimated $100 an hour and $6,000 for an estimated 40 hours of PD time at an estimated $150 an hour. | | |
| | 2) *ESA and NHPA Requirements* - $2,950 total; $2,050 for an estimated 20.5 hours of EP time at an estimated $100 an hour and $900 for an estimated 6 hours of PD time at an estimated $150 an hour. | | |
| | 3) *QAPP, SAP and HASP* - $7,500 total; $5,700 for an estimated 57 hours of EP time at an estimated $100 an hour and $1,800 for an estimated 12 hours of PD time at an estimated $150 an hour. | | |
| | b. Analytical and drilling services | $61,850 | |
| 4. | Consultant services for Risk Assessment and Cleanup Planning (all EP time based on contractor bids) | $27,200 | $27,200 |
| | a. *Human Health and Ecological Risk Assessment* - $18,000 total; $13,500 for an estimated 135 hours of EP time at an estimated $100 an hour and $4,500 for an estimated 30 hours of PD time at an estimated $150 an hour. | $18,000 | |

| | Amount | Total |
|---|---|---|
| b. *Analysis of Brownfields Cleanup Alternatives* - $9,200 total; $6800 for an estimated 68 hours of EP time at an estimated $100 an hour and $2,400 for an estimated 16 hours of PD time at an estimated $150 an hour. | $9,200 | |
| 5. Consultant Services for Feasibility Analysis and Redevelopment Planning | $28,000 | $28,000 |
| a. *Prepare Conceptual Site Plans* - $8,050 for an estimated 53.7 hours of PCC contractors' time at an estimated $150 an hour. | | |
| b. *Prepare Feasibility Plans* - $6,450 for an estimated 43 hours of PCC contractors' time at an estimated $150 an hour. | | |
| c. *Analyze Potential for Renewable Energy Applications* - $13,500 for an estimated 90 hours of PD contractor time at an estimated $150 an hour | | |
| Total Contractual | | $182,100 |

**V. Other**

| | |
|---|---|
| 1. Registration fees for CM and CDD to attend the Northwest Environmental Business Conference, Portland, Oregon ($295 fee for 2 attendees) | $590.00 |

# ATTACHMENT A
# MAP OF SITE



**ATTACHMENT B**
**CITY OF TROUTDALE ORGANIZATIONAL CHART FOR EPA GRANT**